adult male there are patches of a darker colour and of thicker quills, indicating the coming of the winter coat.

This species differs from the Guémul in having, at least in summer, pale haunches and whitish legs. We have in the British Museum the imperfect skin in winter fur of a female, which Admiral Thornby, the brother-in-law of the Earl of Derby, brought from the coast of Chili in 1849. I have hitherto considered it a specimen of the Guémul; but it has much more whitish on the rump and abdomen. It may be the winter coat of *Xenelaphus anomalocera*, or a third species of South-American deer.

The South-American deer called Guazus are *Blastocerus paludosus* from Brazil and Paraguay, *Furcifer antisiensis* and *Xenelaphus anomalocera* (*X. leucotis*, Gray, Cat. Ruminant Mammalia, p. 89) from the Bolivian or Peruvian Alps, *Blastocerus campestris* and *Huamela leucotis* from Patagonia.

LXIV.—*On* Crinodes Sommeri *and* Tarsolepis remicauda, *in answer to Mr. Butler's Remarks.* By C. Ritsema.

In the 'Annals' of last October Mr. Butler rejects my opinion concerning the synonymy of the above-named moths.

It is, however, clear that the author, when he drew up the description of Mr. Cornthwaite's insect, was totally unacquainted with Hübner's *Crino Sommeri*, and that it was only after he saw my synonymic note that he compared the new (?) moth with Hübner's figures, and endeavoured to find some differences which might justify him in retaining his names. Why otherwise did he not mention this very similar moth, or indicate the supposed generic and specific differences when describing the new one?

In the following lines I will refute the arguments used.

Mr. Butler considers *Crino Besckei* the type of the genus *Crino*, because this species is figured before *C. Sommeri*. But, if we pay attention to the characters ascribed by Hübner ('Verzeichniss bekannter Schmetterlinge,' p. 216) to this genus ("Schwingen blass-sehnig, dunkelstriemig, mit glänzend weissen Flecken geziert"), we shall see that this lepidopterist really had in view the species called by him *C. Sommeri*, and that this description, without any modification, applies to Butler's *Tarsolepis remicauda*. With respect to *C. Besckei* it is clear that Hübner was not attached to the so-called type-system, and consequently we have nothing to do here with the last-named species. There is no doubt that *Tarsolepis remicauda* ought to be transferred into the genus *Crino*, Hübner, = *Crinodes*, Herrich-Schäffer.

Whilst Mr. Butler believes that Hübner's figure is really a representation of a male insect, as possessing a well-developed anal tuft of radiating scales (this character, however, occurs also in the Javan females, and is therefore without value), I rather believe it to be a female, on account of the feebly pectinated antennæ. The anal tuft, as covering entirely the sexual organs, may have been the cause of Hübner's mistake; in such cases only the examination of the retinaculum will furnish certainty concerning the sex of the moth.

The want of the two long tufts of carmine hairs at the base of the abdomen most probably must be ascribed to the sex, such tufts being almost confined (at this moment I do not recollect an example of the contrary) to the male insect; they are often totally hidden, as probably is the case with the male in Mr. Snellen's collection.

As regards the length of the palpi, I notice that the females I examined agree in this respect with Hübner's figures, and that Mr. Snellen's specimen (♂) holds the middle between Hübner's and Butler's.

No importance can be attached to the size of the abdomen and to its spinous processes as figured by Hübner, the former depending chiefly upon the sex and the state of desiccation, the latter, formed by some diverging long scales on the sides of the abdomen, occurring also in Mr. Snellen's male. Moreover it is incomprehensible to me how Mr. Butler can regard these processes as a *generic* difference, although nothing of the kind is to be seen in the representation of *Crino Besckei*, the species which, according to Butler, should be the type of the genus *Crino*.

The specific differences summed up by Butler must certainly be ascribed to a great extent to inaccuracies of the artist. In order to prove this it may be sufficient to notice the inner margin of the front wings in both Hübner's figures, which is waved only in fig. 1, and also the hind wings of the same figure, which are unlike one another. Moreover Hübner's figures are coloured too dark, and have almost all the markings (the pale basal patches excepted) defined too sharply, instead of the underside of the wings only, as Mr. Butler states; as for the latter, this author inclines to the contrary.

In the specimens I examined, the pale costal band does not quite extend to the apex and is broader than in Butler's figure, especially at the base of the wings; the central marginal line of the hind wings is continued round the margin, but, at the upper and underside, converted into spots as in Hübner's fig. 2; the transverse band of the front wings is strongly waved and not nearly parallel to the outer margin, whilst the fringe of all the wings is tolerably long.

For these reasons I persist in my assertion that Butler's *Tarsolepis remicauda* is identical, generically as well as specifically, with Hübner's *Crinodes Sommeri*.

After all, I may remark that it is not *impossible* that *C. Sommeri* occurs also in the New World*, although I rather believe it to be a mistake—just as seems to be the case with *Hemeroblemma peropaca*, which, according to Hübner ('Zuträge zur Sammlung exotischer Schmetterlinge,' No. 271, figs. 541 & 542), is from Monte Video, but has since been sent over from Sumatra, Java, Ternate (coll. Royal Mus. Leyden), and Celebes (Mr. Snellen's coll.), and also, with *Ophiusa magica*, received by Dr. Boisduval from Madagascar and Bengal ('Faune Entomologique de Madagascar, Bourbon et Maurice,' Lepidoptères, p. 100), and by the Royal Museum of Leyden from Java, and not from Monte Video as stated by Hübner (Zuträge &c., No. 268, figs. 535 & 536).

Leyden, November 1872.

LXV.—*On the Habits and Distribution of* Lycosa ingens (*Bl.*).

By the Rev. O. P. Cambridge, M.A., C.M.Z.S.

Accounts of the habits of spiders must always be interesting to arachnologists, and especially important to those who may themselves be unable to see their objects of study in a living state. The question, therefore, now raised (not for the first time†) by Mr. F. Pollock's account (Ann. Nat. Hist., Oct. 1872, p. 271) of the habits of *Lycosa ingens* (Bl.) is one on which, as an arachnologist, I should wish to have some clearer and more detailed evidence. I allude to the possibility of a spider swallowing solid matter; in the instance recorded by Mr. Pollock the solid matter consisted of the "bones, and head, and claws and all" of a lizard 3 inches long, "the only remnant of the feast being a small ball about ¼ of an inch in diameter."

My own impression has always been that no arachnid could do more than swallow the juices of its prey, or at most such other parts as could be so completely comminuted by the action of the fangs, falces, and maxillæ as to be enabled to pass in a kind of semifluid state through the simple but very small passage to the stomach. Did Mr. Pollock's spider thus comminute the "bones, head and all" of the lizard, except that small portion represented by the ball of a quarter of an inch in

* I am informed (October 14th, 1872) by Mr. Walker that at present he has no opportunity of inspecting the specimen from Rio Janeiro, mentioned in the 'List of the Specimens of Lepidopterous Insects in the Collection of the British Museum' (*l. c.*), because it is no longer in Mr. Fry's collection.

† *Vide* 'Entomologist' for June 1870, No. 77, pp. 65–67.